REMARKS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-23, 25-26 and 30-44 are pending in this application.

Rejection under 35 U.S.C. §101:

Claims 26, 32 and 35 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Applicant respectfully traverses this rejection.

In particular, independent claims 26 (and hence claims 32 and 35 which depend therefrom) requires "A *computer readable storage medium*, tangibly embodying a program of instructions executable by a computer to perform steps (emphasis added)...." Claims 26, 32 and 35 are thus clearly directed to a manufacture, one of the explicitly enumerated categories of statutory subject matter identified by 35 U.S.C. §101. Moreover, the Board of Appeals of the USPTO has held that *Beauregard*-type claims (i.e., manufacture recitation of process), like claims 26, 32 and 35, are patent eligible under 35 U.S.C. §101. See *Ex parte Bo Li*, Appeal 2008-1213 (USPTO BPAI 11/6/2008). The Office Action's allegation that the claimed "*computer readable storage medium*" includes paper, and hence is drawn to a form of energy (see pages 3-4 of the Office Action) is clearly erroneous. As discussed above, claims 26, 32 and 35 are drawn to a manufacture, and thus are drawn to statutory subject matter under 35 U.S.C. §101.

Rejections under 35 U.S.C. §103:

Claims 1-15, 17-23, 25-26 and 30-32 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kramer et al. (U.S. '574, hereinafter "Kramer") in view of Wang et al. (U.S. '147, hereinafter "Wang") and further in view of Adar et al. (U.S. '702, hereinafter "Adar"). Applicant respectfully traverses this rejection.

In order to establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. The <u>three</u>-way combination of Kramer, Wang and Adar fails to teach or suggest all of the limitations required by independent claims 1, 9 and 26. For example, the three-way combination fails to teach or suggest "receiving user inputs made during a browsing session, and amending score values for attribute data items associated with the display items *as the browsing session continues*," as required by independent claim 1 and its dependents. Similar comments apply to independent claims 9 and 26.

Page 8 of the Final Rejection admits that "Kramer does not explicitly teach the claimed limitation 'means for receiving user inputs made during a browsing session', 'means for amending the score values in response to the user inputs as said browsing session continues' and 'output means for displaying an output identifying the selected further display item or items during said browsing session.'" Neither Adar nor Wang resolves this admitted deficiency of Kramer. For example, col. 3, lines 15-28 (specifically identified by the Office Action) of Adar discloses the following:

> Google's metric of importance is based upon two primary factors: the number of pages (elsewhere on the Web) that link to a page (i.e., "inlinks," defining the retrieved page as an "authority"), and the number of pages that the retrieved page links to (i.e., "outlinks," defining the retrieved page as a "hub"). A page's inlinks and outlinks are weighted, based on the Google-determined importance of the linked pages, resulting in an importance score for each retrieved page. The search results are presented in order of decreasing score, with the most important pages presented first. It should be noted that Google's page importance metric is based on the pattern of links on the Web as a whole, and is not limited (and at this time cannot be limited) to the preferences of a single user or group of users.

The Google's "page importance" metric described the above passage of Adar is not linked to the preferences of any individual user but on the pattern of links in the Web as a whole.

In contrast, claim 1 not only tailors a search to an individual's preferences, but revises the attributes on which the search is based, <u>during the course of that search</u> (see claim language stating *"amending the score values in response to the user inputs as said browsing session continues"*). The invention of claim 1 thus responds, not to the user's <u>historic</u> preferences (as in Kramer col. 2 lines 56-*et seq.*) or to the number of "inlinks" and "outlinks" (as in the above-cited portion of Adar), but to his/her <u>currently-defined</u> requirements, refined as the search progresses.

Like Adar, Wang also fails to resolve the admitted deficiencies of Kramer. Instead, Wang discloses an internet browsing process where a user explicitly requests pages (as in normal web browsing), but those pages are represented as derived content rather than content in its original form ("primary content"). Wang discloses how derived content is built from primary content. This derivation essentially relies on guidance indicating what changes need to be made (for example, the user might provide guidance that indicated a need for audio, rather than text-based browsing). Accordingly, if a user requested a specific page via a URL, Wang's system would seek the guidance created by that user that he/she requests an audio link rather than a text display, and then turn the primary content into an audio presentation (i.e., the derived content).

There is no teaching or suggestion in Wang of amending score values for attribute data items (e.g., key words) associated with display items as the browsing session continues. For example, no learning (within the same session or across sessions) takes place and no dynamic user profiles are created and progressively amended over the course of the same session. Wang relates primarily to navigating a database (using voice commands), and does not change any attributes of the data in the database. Instead, Wang discloses merely navigating according to existing attributes.

Moreover, Wang's scoring process involves deciding which two (or more) pieces of additional content are suitable to be used as part of the derived content. This scoring process calculates the distance apart in a tree-based structure, and selects the additional piece of content based on which is "closer" in that tree to the ideal. This scoring process to select the appropriate derived content fails to disclose amending the score values of attribute data items associated with display items in response to user inputs as the browsing session continues as required by independent claims 1, 9 and 26. Wang's scoring is accomplished based on static guidance and model creation, rather than through the use of a dynamic, interactively updated profile of score values for attribute data items associated with display items.

To facilitate a clearer understanding of claim 1, attention is directed to the following non-limiting example supported by the present application. First, it is noted that claim 1 involves modifiying score values attached not directly to the display items themselves, but to the attributes associated with, and shared by, them. Suppose an individual display item (e.g., item 4PH37D illustrated in Figure 5 of the present applciation - a specified winter break in Zell am Zee) is selected by a user. The selection of this particular display item changes the score value of all the attributes associated with that display item (e.g., *skiing, Austria, February*), thereby weighting the search towards display items also having these attributes, (or some of them). Further user inputs refine this by further modifying the score values of the attributes associated with the items selected by the user. For example, the user may next be presented with display items showing (i) a _skiing_ holiday in the USA in December, (ii) a walking holiday in _Austria_ in July, and (iii) a tour of the historic sites in Egypt in _February._ Based on this changed presentation, the user may then select the third ((iii) a tour of the historic sites in Egypt in

February) of these items. This selection reinforces the score for the "February" attribute, but reduce the scores for the "skiing" and "Austria" attributes.

Dependent claim 19 requires "wherein the reward accrued by attribute data items due to association with non-selected display items is *negative* where the selected display item reward is *positive*, and *positive* where the selected display item reward is *negative* (emphasis added)." While col. 15, lines 23 *et seq.* (specifically identified by the Office Action) of Adar discloses the user selecting "positive relevance feedback" or "negative relevance feedback", theses types of feedback in Adar are not associated with non-selected display items or selected items (or *vice versa*).

Claim 16 has been rejected under 35 U.S.C. §103 as allegedly being unpatentable over the four-way combination of Kramer in view of Wang and Adar and further in view of Cheng et al. (U.S. '301, hereinafter "Cheng"). Applicant traverses this rejection.

Claim 16 requires, *inter alia*, "where the changes to attribute data item score values are so arranged that the sum of score values across all attribute data items is zero." Page 25 of the Office Action admits that Kramer fails to teach the above noted claim limitation. Cheng fails to resolve this admitted deficiency. While paragraph [0041] (specifically identified by the Office Action) of Cheng discloses generating a travel attribute comparison score and various subscores such as an adventure or fitness subscore, these scores or subscores fail to teach or suggest changing attribute data item score values so that the sum of score values across all attribute data items is zero.

Through these claimed features, the sum of the scores in a user profile does not change during a session -- so if the sum of the score values is 1000 and that user logs on, it will still sum to 1000 even after user inputs are made and scores are amended in accordance with those user

inputs (e.g., the sum will still be 1000 at log-off). As score values for some attribute data items increase, the score values of other attribute data items will decrease, so that the sum of the score value changes will sum to zero.

Claims 33-35 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over the four-way combination of Kramer in view of Wang and Adar and further in view of Kim et al. (U.S. '959, hereinafter "Kim"). Applicant traverses this rejection.

Claim 33 requires, *inter alia*, "wherein the sum of all score values remains the same value even after the score values are amended in response to the user inputs." Claims 34 and 35 each requires a similar limitation. Page 27 of the Office Action admits that Kramer fails to teach the above noted claim limitation. Kim fails to resolve this admitted deficiency. While paragraphs [0038]-[0039] (specifically identified by the Office Action) of Kim discloses updating a minimum unlikelihood score (Min), amending any such minimum unlikelihood score (Min) does not teach of suggest the sum of all score values remaining the same value even after the score values are amended. Through these claim limitations, the sum of the scores in a user profile remains the same during a session. As score values for some attribute data items increase, the score values of other attribute data items will decrease, so that the sum of all of the score values will remains the same value.

Accordingly, Applicant respectfully requests that the above rejections under 35 U.S.C. §103 be withdrawn.

New claims:

Claims 36-44 have been added and are deemed to be allowable at least for the same reasons as their respective base independent claims.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____
Raymond Y. Mah
Reg. No. 41,426

RYM:dmw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100